

Nevada Site Specific Advisory Board (NSSAB)

Full Board Meeting

Bob Ruud Community Center 150 N. Highway 160, Pahrump, NV 4:00 p.m. – August 16, 2017

Members Present: Amina Anderson, Michael Anderson, Arcadio Bolanos, Frank

Bonesteel (Vice-Chair), Michael D'Alessio, Karen Eastman, Raymond Elgin, Richard Gardner, Donald Neill, Steve Rosenbaum (Chair), Edward Rosemark, Jack Sypolt, Dina

Williamson-Erdag

Members Absent: Pennie Edmond, Charles Fullen, Autumn Pietras, William Sears,

Cecilia Flores Snyder, Richard Stephans, Richard Twiddy

Liaisons Present: Richard Arnold (Consolidated Group of Tribes and

Organizations [CGTO]), John Klenke (Nye County Nuclear Waste Repository Project Office [NWRPO]), Phil Klevorick (Clark County), Mark McLane (State of Nevada Division of Environmental Protection [NDEP]), Vance Payne (Nye County

Emergency Management [NCEM]), Jonathan Penman-

Brotzman (U.S. National Park Service [NPS])

Liaisons Absent: Carol McKenzie (White Pine County Commission), Dan

Schinhofen (Nye County Commission), Delon Winsor

(Esmeralda County Commission)

Student Intern: Anthony Graham (University of Nevada, Las Vegas [UNLV])

Department of Energy (DOE): Robert Boehlecke, Tiffany Lantow, Kelly Snyder (Deputy

Designated Federal Officer [DDFO]), Bill Wilborn

Facilitator: Barb Ulmer (Navarro)

Contractors: Lynn Kidman, Marc Klein, Christy Morris (Navarro); Jenny

Chapman, Duane Moser, Chuck Russell (Desert Research

Institute [DRI])

Public Signed In: Diane Brungard, Pauline Hatcher (Pahrump, NV), Robin

Hebrock (Pahrump Mirror), John Pawlak, Frank Rosario

(Pahrump, NV), Daria Sokolova (Pahrump Valley Times), David

Stevens, Bill Stremmel (Pahrump, NV)

Open Meeting/Chair's Opening Remarks

Chair Steve Rosenbaum welcomed everyone to the meeting and thanked members of the public for their attendance. He also congratulated Robert Boehlecke on his selection as the Program Manager for the Environmental Management (EM) Nevada Program. Following the Chair's opening remarks, Member Edward Rosemark moved to approve the agenda as presented. The motion was seconded and passed unanimously.

Public Comment

The following written comment was read during the meeting:

SINCE THIS IS NATIONAL LAND, WHO IS REPRESENTING THE INTERSTS OF THE NATION IN USE OF ITS NATIONAL LAND. THIS IS NOT JUST NEVADA LAND. THIS IS NATIONAL LAND OWNED BY 325 MILLION PEOPLE. IS ANYBODY THERE SEEING THAT OUR LAND IS USED FOR THE BETTERMENT OF THIS CONTRY AND NOT JUST USED AS PROFITEERING FOR LOCALS? I THINK WE HAVE ELEMENTS MISSING IN THIS KIND OF STATE SETUP WHERE NOBODY APPEARS TO BE RREPRESENTING THE NATION WHO OWNS THE LAND, PAYS FOR IT, HAS PAID FOR IT AND WANTS ITS BENEFITS FOR ALL OF US. JEAN UPBLIEE JEANPUBLIC1@GMAIL.COM

WILL SOMEONE PLEASE STAND UP AND SAY THEY ARE LOOKING OUT FOR THIS NATIONS INTEREST IN THIS NATIONALLY OWNED LAND? THIS COMMENT IS FOR THE PUBLIC RECORD. PLEASE RECEIPT. JEAN PUBLIEE <u>JEANPUBLIC1@GMAIL.COM</u>

U.S. DOE Update (Robert Boehlecke, DOE)

Mr. Robert Boehlecke thanked Chair Rosenbaum and the Board for the congratulations and added that it is an honor to provide the DOE Update at the NSSAB meetings.

In September 2017, Mr. Boehlecke informed the Board that he will be attending two conferences. The RadWaste Summit in Las Vegas, Nevada, from September 5-7, focuses on radioactive waste issues, and the National Cleanup Workshop in Washington, D.C., on September 13-14, focuses on the progress of EM cleanup activities across the nation. Both of these annual conferences bring together DOE representatives, industry leaders, elected officials, and stakeholders.

Mr. Boehlecke noted that the contract for the Management and Operating contractor for the Nevada National Security Site (NNSS) was awarded to Mission Support and Test Services, LLC. The contract transition is expected to take several months and be complete in the late November 2017 timeframe.

Mr. Boehlecke provided an update for two upcoming shipping campaigns of low-level radioactive waste (LLW) to the NNSS. Preparation for field work to remove contaminated soils continues at the Tonopah Test Range. The revised schedule is for field work to begin in September 2017 with shipments to the NNSS planned to begin in the late September or early October 2017 timeframe. The second shipping campaign is from West Valley, which is a DOE site in New York. West Valley is in the process of demolishing a nuclear facility that consists of LLW, primarily concrete and steel. LLW containers will be transported by rail, offloaded onto trucks in Parker, Arizona, with the final destination as the NNSS. This method of intermodal transport is not a new practice

for DOE, although the majority of waste shipments are transported exclusively by truck to the NNSS.

Mr. Boehlecke concluded by announcing that Jim Owendoff is the new acting Assistant Secretary for EM (EM-1).

Liaison/Student Intern Updates

Clark County (Phil Klevorick)

Liaison Phil Klevorick reported that he will also be attending the RadWaste Summit and the National Cleanup Workshop. At these national conferences, he relayed the importance of promoting the message of the successes and the vital mission the NNSS fulfills for LLW disposal for the entire DOE complex. Without the participation of the EM Nevada Program at the NNSS and the State of Nevada, other DOE sites would be hindered in fulfilling its cleanup goals. Liaison Klevorick asked Mr. Boehlecke to provide an update on the last meeting of the LLW Stakeholders Forum (LLWSF) following his update. He informed the Board of meetings held by the Nevada Preventive Radiological/Nuclear Detection Program. This group was formed, consisting mainly of emergency managers, planners, and first responders, including representatives from every county in Nevada, to develop a plan for radiological and nuclear threats or incidents within the state. The plan is anticipated to be complete by the November 2017 timeframe. Lastly, Liaison Klevorick updated that the Waste Isolation Pilot Plant is currently accepting transuranic waste (TRU), at a reduced level of operations, mainly from Idaho. Nevada is not currently part of the shipping campaign for TRU waste, although the Nevada Highway Patrol has been invited to attend training sessions in other states in order to keep active certifications.

Mr. Boehlecke summarized the last quarterly meeting of the LLWSF that was held in Pahrump, Nevada, on August 2, 2017. An update on LLW transportation and disposal at the NNSS and a presentation on the Radioactive Waste Acceptance Program (RWAP) was provided during the meeting. The Nevada EM Program is requesting ideas for LLW transportation topics and speakers for future LLWSF meetings.

CGTO (Richard Arnold)

Liaison Richard Arnold updated that the next meeting of a CGTO subgroup to discuss revegetation efforts for the 92-Acre closure cap at the Area 5 Radioactive Waste Management Complex will be held from August 28-31, 2017. Tribal elders will be evaluating the test plots and further discussing the path forward for the experimental design. A tribal blessing to prepare the land in a culturally appropriate way is being planned. Liaison Arnold will be meeting with NDEP tomorrow to provide an update on current activities. In April 2017, Liaison Arnold reported that the CGTO met with the National Nuclear Security Administration (NNSA) and DOE's Office of Legacy Management (OLM). One of the topics discussed was OLM's responsibilities at the Central Nevada Test Area and Shoal site under the Native American Graves Protection and Repatriation Act of 1990, whereby federal agencies are required to consult with tribes on artifacts with a cultural affiliation. Another tribal committee will be meeting with the Nevada Field Office in September 2017 to identify future projects and tribal involvement. Liaison Arnold concluded that he recently traveled to the Los Alamos National Laboratory in New Mexico to get an update on tribal interactions and the different opportunities available when collaborating with both DOE EM and the NNSA.

NCEM (Vance Payne)

Liaison Vance Payne opened that there will be a meeting with the NNSA in Nye County the second week in January 2018 to discuss emergency response planning. Communication issues that could arise from a radiological incident will be discussed and a five-call plan will be tested for effectiveness during this meeting. He thanked Mr. Boehlecke and the EM Nevada Program for assisting with the initial planning. Liaison Payne reported that NCEM has integrated a health monitoring system, which is planned to be implemented state wide. Within the next 60 days, NCEM will employ the RadWatch Program for transportation incidents. Health monitoring systems will be given to primary highway responders and to Nye County first responders. These systems will be kept in emergency vehicles and issued to personnel when they respond to an incident. With these devices, NCEM is able to monitor any radiation exposure and to also track an accumulative exposure for an individual. Jon Bakkedahl, State of Nevada Division of Emergency Management (NDEM) Training Officer, was the lead for this project. Liaison Payne stated that he received a State of Nevada Division of Forestry grant to retrofit seven fire trucks in Nye County with a new compressed foam system. This system will be utilized during transportation incidents for suppression of vapors that may be explosive and for suppression of airborne radioactive materials. Liaison Payne concluded that Pahrump was chosen as the location for the annual Emergency Preparedness Summit that will be hosted by the NDEM on February 6-7, 2018 at the Pahrump Nugget.

NDEP (Mark McLane)

Liaison Mark McLane reported that NDEP approved the mixed LLW (MLLW) permit modification. NDEP engineers will observe the construction of the new MLLW cell, which is scheduled to begin in September 2017. Once construction is complete in the April 2018 timeframe, DOE will submit a final report to NDEP regarding fulfillment of all construction requirements. Before waste can be emplaced into the new MLLW cell, NDEP will need to approve the final construction.

NPS (Jonathan Penman-Brotzman)

Liaison Jonathan Penman-Brotzman stated that the NPS is interested in EM groundwater activities at the NNSS as the Death Valley flow system terminates in Badwater Basin in Death Valley National Park (DVNP). He continued that the NPS is also interested in the transportation of LLW to the NNSS as one of the transportation routes shares a boundary with the DVNP. DVNP does have law enforcement and fire response and cooperates with Nye County and other neighboring counties as emergency responders. DVNP will be releasing environmental assessments (EAs) in final draft for Scotty's Castle and the Grapevine Canyon Road system that connects the park with Beatty and Tonopah, Nevada. These EAs are in response to the 2015 flood disaster that destroyed much of the park infrastructure in that area. Liaison Penman-Brotzman concluded that another EA for the Panamint Range within DVNP will be released in the next few days for public scoping.

UNLV Student Intern (*Anthony Graham*)

Student Intern Anthony Graham updated that he continues to email out his NSSAB UNLV newsletters to the student body. He plans on contacting UNLV professors of any classes that may be interested in the work of the NSSAB. Student Intern Graham concluded that he is working with the National Council of Public History to interest amateur and professional historians to tour the NNSS to learn more about the mission of the NSSAB and the balance of environmental protection and historic preservation aspects at the NNSS.

<u>Proposed Changes to Long-Term Monitoring at Closed Industrial and Soils Sites – Work</u> <u>Plan Item #3 (*Tiffany Lantow, Long-Term Monitoring Technical Lead, DOE*)</u>

NSSAB Work Plan Item #3

 The NSSAB will provide a recommendation, from a community perspective, regarding proposed changes to current long-term requirements for closed Corrective Action Sites (CASs) on the NNSS

Background

- Federal Facility Agreement and Consent Order sites that have been closed in place have requirements for annual inspections and/or maintenance
- Inspections and maintenance are required to ensure that any controls (posting, fencing, landfill caps, etc.) are maintained and are performing as designed
 - Controls and inspection requirements vary by site based on the potential hazards
 - Climate, weather events, animal burrows, and other factors may affect the controls over time
- Based on historical inspection and maintenance results coupled with the potential hazards associated with sites, it is proposed that the frequency of inspection for candidate sites be reduced
- Changes will be proposed to NDEP and requires their approval
- o Goal is to adjust monitoring at closed sites as appropriates to the risk

Process for Proposed Changes

- Tonight, four sites where changes to long-term monitoring requirements are being considered will be presented
- However, these are just four of the ~150 sites where long-term monitoring inspections are conducted
- DOE has been use-restricting sites for 20 years, and the knowledge and the process has evolved over time
- As the end of the Environmental Restoration program approaches, it is an opportune time to begin looking at each site for standardization
- DOE is asking the NSSAB to provide a recommendation regarding the proposed changes for each of the four individual sites presented
- DOE is also asking the NSSAB to consider for each site whether or not the NSSAB believes the approach and reasoning being considered when proposing changes is recommended for similar use-restricted sites

Map of Closed CASs with Monitoring Requirements to be Discussed

- o These CASs are candidates for changing the post-closure monitoring requirements
- However, they are representative of a number of other closed CASs on the NNSS where changes may be proposed in the future

Underground Instrument House Bunker (CAS 01-34-01)

- Instrument bunker is the site of contamination resulting from legacy testing operations
- Investigation results indicated no contamination outside of the bunker; sample taken inside indicated polychlorinated biphenyl (PCB)
- Bunker was closed in place with a use restriction (UR)
- Current monitoring requirements: annual inspections
- o Current site condition: bunker door closed and secured; warning signs on exterior
- o Why is change being considered?
 - This site is a candidate for reduction in frequency of inspections due to low risk

- o Options:
 - No change; continue annual inspections; or
 - Reduce inspections to every five years

U-30a, b, c, d, e Craters (CAS 30-45-01)

- Radioactivity resulting from legacy testing is present at the U-30a, b, c, d, & e
 Craters (Buggy test)
- UR in place to protect from radiological dose
- o Current monitoring requirements: annual inspection of signs and fencing
- Current site condition: fenced and posted
- o Why is change being considered?
 - Remote site in Area 30 with an unmaintained access road that is the only practical route to the site
- o Options:
 - No change; leave fence up, and continue inspections of entire perimeter every year; or
 - Change requirement to inspection of the full perimeter every five years and annual verification that only the signs (not fencing) at the access points or along access roads are intact in the intervening years

UD-3a Disposal Hole (CAS 03-20-07)

- 152-foot deep borehole with a 32-inch diameter steel casing that was used for the disposal of rad-chem effluent associated with testing; because of this radionuclides are assumed to be present at bottom of hole
- Completed restoration activities: gravel-filled from bottom to 20 feet below ground surface and cemented from 20 feet below ground surface to surface; UR warning signs posted
- o Current requirements: annual inspections of UR signs
- Why is change being considered:
 - Risk of exposure to contamination at the bottom of a 152-foot deep borehole that is grouted in place is very low
- o Options:
 - No change; annual inspections continue and site remains posted; or
 - Reduce inspections to every five years; or
 - Remove the sign entirely and discontinue inspections

• CAU 551, Area 12 Muckpiles (CAS 12-01-09, 12-06-05, 12-06-07, 12-06-08)

- Radioactive contamination at muckpiles resulting from legacy testing
- Completed restoration activities; investigation results indicated total petroleum hydrocarbons and radiological contamination; sites closed in place with UR
- Current requirements: annual inspections of UR signs
- o Why is change being considered?
 - Access to this site is extremely difficult and the access road is impassible
- o Options:
 - No change; maintain UR and inspection points; or
 - Move UR postings and annual inspection point to the first access location (locked gate) along the road

In response to Board questions, the following clarifications were provided for the Underground Instrument House Bunker (CAS 01-34-01):

 The PCB contamination in the Underground Instrument House Bunker was less than eight parts per million and was found at a maximum level in the stain on a concrete sample from inside the bunker. Based on current risk-based action levels, this site would not be userestricted today as all the contaminants are below an industrial action level; in other words, a person could spend 2,000 hours in a year inside the bunker and still not receive a dose above the action levels.

- The door for the Underground Instrument House Bunker is padlocked.
- Before proposing a reduction of inspections for long-term monitoring at a closed site, the EM Nevada Program reviews past inspections on record that documented no changes.
- Inspections at closed corrective action sites are typically conducted on a one-year or a fiveyear cycle. Sites that are closed under the Resource Conservation and Recovery Act permit undergo quarterly or semiannual inspections.
- Currently, there is not a monitor/alarm on the Underground Instrument House Bunker door that would alert employees if the door is opened without prior authorization.
- The Underground Instrument House Bunker site has been closed since 2006.
- The EM contractor, Navarro, performs inspections on the closed sites. A team of two employees complete these inspections on either a one-year or five-year cycle and schedule the inspections for sites that are geographically close to one another. Some sites are more complex and take a full day to inspect while other sites take less than one day. The type of inspection conducted is based on the individual sites, examples include visual inspection of signs and fencing and the security of items within the closed area.
- This is the beginning of an effort to review all closed sites for proposed changes for longterm monitoring. The EM Nevada Program does have discussions with NDEP on any proposed changes.
- Using a sealant or similar process to mitigate the contamination in the Underground Instrument House Bunker would not remove the hazard or the requirement to inspect the site. The contamination levels are below regulatory requirements to take any corrective action, although it would not preclude the EM Nevada Program from conducting a best management practice in this case, which has not yet been discussed for this site.
- There is no future use planned for the Underground Instrument House Bunker.
- These closed sites are located on the NNSS and protected by an advanced security team and are not accessible to the general public. Authorized NNSS employees are trained in the procedures for receiving permissions to access use-restricted sites in order to conduct work.
- On average, the inspection costs for a closed site is \$1,500 per year.

In response to Board questions, the following clarifications were provided for U-30a, b, c, d, e Craters (CAS 30-45-01):

- For the U-30 craters, the investigation work was performed at the surface, and the
 contamination was below the action levels. Because this was a subsurface test, a use
 restriction was put in place for any subsurface contamination inside the crater. The
 subsurface contamination is unknown as the EM Nevada Program was unable to obtain a
 sample from inside of the crater.
- Annually, the NNSS Environmental Report provides information on the monitoring of the wildlife and habitats on the NNSS. This report is available for the public and is accessible at http://www.nnss.gov/pages/resources/library/NNSSER.html
- Drone technology is not currently utilized for EM cleanup work, although the EM Nevada Program may consider for certain applications as the technology develops. Use of fly-over radiation surveys by airplane or helicopters have been used in past investigations to track any migration of contamination from the date of a nuclear device test to the present.

In response to Board questions, the following clarification was provided for UD-3a Disposal Hole (CAS 03-20-07):

 For the UD-3a Disposal Hole, there was no contamination detected at the surface of the borehole. During investigation activities, a hole was drilled 13 feet away, parallel, and deeper than the borehole, and no contamination was detected that was close to action levels.

In response to Board questions, the following clarifications were provided for CAU 551, Area 12 Muckpiles (CAS 12-01-09, 12-06-05, 12-06-07, 12-06-08):

- The N, T, and E-tunnels are not associated with the Area 12 Muckpiles. These muckpiles are up-gradient from E-tunnel.
- For the Area 12 Muckpiles, inspections are conducted on an annual basis. These
 muckpiles are located on a hillside and contain contaminated materials; therefore the EM
 Nevada Program would continue to monitor on an annual basis, especially in the case of a
 possible rain event.
- During the review of long-term monitoring requirements, each closed site will be assessed individually based on its unique characteristics, i.e. geology, geography, type of contamination, etc., by the DOE and its contractor. Any changes to long-term monitoring requirements at closed sites at the NNSS would require NDEP's approval.

Member Michael D'Alessio made a motion to recommend that DOE request NDEP's approval to discontinue any inspection requirements for the Underground Instrument House Bunker and use this as a precedent for sites with similar conditions. The motion was seconded and passed by a majority with one member abstaining. After further Board discussion, there was confusion among the members whether the motion was for just for the Underground Instrument House Bunker or if the motion was for the Underground Instrument House Bunker, the U-30a, b, c, d, e Craters and the UD-3a Disposal Hole. Member Jack Sypolt made a motion to reconsider the previous motion and to consider each of the four sites individually. The motion was seconded and passed by a majority.

Chair Rosenbaum requested a hand vote for each of the options for each of the individual sites, as follows:

- Underground Instrument House Bunker (CAS 01-34-01)
 - No change; continue annual inspections 0 votes
 - Reduce inspections to every five years 2 votes
 - Other ideas? Discontinue inspections entirely 9 votes
- **U-30a, b, c, d, e Craters** (CAS 30-45-01)
 - No change; leave fence up, and continue inspections of entire perimeter every year
 0 votes
 - Change requirement to inspection of the full perimeter every five years and annual verification that only the signs (not fencing) at the access points or along access roads are intact in the intervening years – 6 votes
 - Other ideas? Discontinue inspections entirely 7 votes
- **UD-3a Disposal Hole** (CAS 03-20-07)
 - o No change; annual inspections continue and site remains posted 0 votes
 - Reduce inspections to every five years 1 vote
 - o Remove the sign entirely and discontinue inspections 12 votes
 - o Other ideas? None
- CAU 551, Area 12 Muckpiles (CASs 12-01-09, 12-06-05, 12-06-07, 12-06-08)
 - No change; maintain UR and inspection points 0 votes

- Move UR postings and annual inspection point to the first access location (locked gate) along the road – 11 votes
- Other ideas? Discontinue inspections entirely 0 votes

The Board had further discussion on the question whether the Board supports these approaches for sites with similar conditions. Due to the lateness of the hour and upcoming agenda items, Chair Rosenbaum suggested that a decision on this question be tabled and brought up again at a future time.

Site	NSSAB Recommendation
Underground Instrument House Bunker (CAS 01-34-01)	Discontinue inspections entirely
U-30a , b , c , d , e Craters (CAS 30-45-01)	Discontinue inspections entirely
UD-3a Disposal Hole (CAS 03-20-07)	Remove the sign entirely and discontinue inspections
CAU 551, Area 12 Muckpiles (CASs 12-01-09, 12-06-05, 12-06-07, 12-06-08)	Move use restriction postings and annual inspection point to the first access location (locked gate) along the road

Member D'Alessio moved to approve a letter going forward to the DOE with the NSSAB's recommendations for the preferred options listed in the table above for each of the four sites located on the NNSS. The motion was seconded and passed by a majority with one member abstaining.

Communication Improvement Opportunities – Work Plan Item #9

There were no recommendations for Communication Improvement Opportunities.

Follow-up to Groundwater Communication Activities – Work Plan Item #7

Facilitator Ulmer recapped that the NSSAB received a briefing on Groundwater Communication Activities – Work Plan Item #7 at the June 21st Full Board meeting. This work plan item asked that the NSSAB provide a recommendation, from a community perspective, if additional communication tools should be developed to help communicate groundwater-related topics to the general public. The NSSAB requested additional information on non-groundwater outreach efforts conducted by the EM Nevada Program and cost information on the NSSAB. Both these items were emailed to the Board on July 27, 2017 in preparation for tonight's Board deliberation.

Member Dina Williamson-Erdag expressed appreciation for the additional information that was provided to the Board in support of this work plan item and the efforts that DOE is putting into public communication activities. After Board discussion, Member Rosemark made a motion that the NSSAB recommend that the DOE continue its current outreach efforts for the EM Nevada

Program based on the present level of interest by the general public. The motion was seconded and passed by a majority.

Other NSSAB Business (Steve Rosenbaum, Chair)

From October 16-19, 2017, Chair Rosenbaum and Vice-Chair Bonesteel will attend the fall EM SSAB National Chairs' Meeting hosted by the Hanford Advisory Board in Kennewick, Washington. Chair Rosenbaum noted that this is an opportunity for each of the eight Boards to provide round robin topics directly to the new acting EM-1, Jim Owendoff, on the Board's top interests/concerns and/or Board accomplishments. Chair Rosenbaum opened it up to the Board for discussion on potential round robin topics.

For NSSAB accomplishments, the Board chose to emphasize the diversity of the Board with members from both rural and urban communities with a variety of backgrounds and experiences. The NSSAB provides valued stakeholder input, and DOE accepts a high percentage of NSSAB recommendations. Also discussed was a successful student intern program, and an effective collaboration with liaisons from various organizations who provide valuable input on EM activities. The NSSAB is the only SSAB that participates in its membership drives and provides a recommendation to the EM Nevada Program on a slate of candidates. DDFO Snyder noted that articles have been recently published that focus on the diversity of the NSSAB and the student intern. These articles may be used to supplement the round robin for Nevada and copies available at the national meeting. Another accomplishment offered by a liaison is the inclusion of NSSAB observers on RWAP assessments.

At the spring national chairs' meeting after receiving additional information from DOE's Office of Transportation, Chair Rosenbaum reminded the Board that he withdrew the proposed recommendation to conduct a follow-up national survey to assess potential exposure from truck transport of DOE waste across the country. He went on to explain that the EM SSAB was receptive to entertain a draft recommendation that DOE utilize the 2003 NNSS transportation study to create a new or revised communication tool for public outreach on a national level. Chair Rosenbaum asked the Board if he should proceed with this item as a potential work product at the national meeting or as a Board concern for the round robin.

The Board discussed the hazards of a semi-truck transporting radioactive waste to the NNSS pulling over on Nevada two-lane highways due to a mechanical breakdown. An NSSAB member felt that there is not adequate room for vehicles to pull to the side of the road to permit emergency vehicles to pass quickly. One of the liaisons clarified that the Nevada Department of Transportation (DOT) has ultimate responsibility for transportation infrastructure, not the DOE. This liaison added that Nevada should have the most highly-trained team of first responders in the nation. This could be accomplished by providing the resources to instruct and equip first responders, resulting in a strengthened emergency management response system along Nevada's transportation corridors, and by fostering a linkage between the DOE and the U.S. and Nevada DOTs.

Chair Rosenbaum asked the Board for members who are interested in representing the NSSAB at the quarterly LLWSF meetings in FY 2018. Vice-Chair Frank Bonesteel volunteered for this position in FY 2018 with Chair Rosenbaum serving as his alternate.

Chair Rosenbaum noted that elections will be held for the Chair and Vice-Chair positions at the September 20, 2017 Full Board meeting. A list outlining the responsibilities for both positions was

provided to the Board. Chair Rosenbaum asked members to consider running for a leadership position. Interested members are asked to notify the NSSAB Office by August 31, 2017.

Four letters were provided to Board members for informational purposes:

- NSSAB Recommendation for Groundwater Sampling Techniques ~ Work Plan Item 5, dated April 19, 2017
- DOE Response to NSSAB Recommendation regarding Groundwater Sampling Techniques
 Work Plan Item 5, dated June 22, 2017
- NSSAB Recommendation for Internal Peer Review Process (Rainier Mesa/Shoshone Mountain GoldSim Model) ~ Work Plan Item 6, dated April 19, 2017
- DOE Response to NSSAB Recommendation for Internal Peer Review Process (Rainier Mesa/Shoshone Mountain GoldSim Model) ~ Work Plan Item 6, dated June 22, 2017

Liaison/Student Intern Updates (continued)

NWRPO (John Klenke)

Liaison John Klenke reported that he attended a meeting today at the U.S. Geological Survey to rollout a new preliminary model of the Death Valley Regional Flow System (DVRFS) that includes the NNSS flow systems. This DVRFS model will continually be updated with a final version anticipated in the spring 2018.

Meeting Wrap-Up and Adjournment

Upcoming calendar of events:

- RWAP Assessment August 28-31, 2017 in Idaho Falls, ID
- RadWaste Summit September 5-7, 2017 in Las Vegas, NV
- Next Full Board Meeting September 20, 2017 in Las Vegas, NV
 - No Educational Session
 - 4 p.m. Full Board Meeting
- EM SSAB National Chairs' Meeting October 16-19, 2017 in Hanford, WA
- NSSAB Work Plan Tour of the NNSS October 25, 2017
- LLW Stakeholders Forum November 9, 2017

Any questions on the calendar of events, please contact the NSSAB Office at 702-630-0522.

Member D'Alessio moved that the meeting be adjourned. The motion was seconded and passed unanimously.

Meeting adjourned at 7:29 p.m.